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 08/06/01

11046 U.S. PTO
09/922168

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Douglas S. Brungart
Serial No.:
Filed:
For: SPEECH-BASED AUDITORY DISTANCE DISPLAY

Group Art Unit:
Examiner:

DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In keeping with the duty of candor and good faith owed to the Patent and Trademark Office, applicant wishes to make of record the items on the attached PTO Form 1449.

U.S. Patent No 6,118,875 to Møller, et al. is uses of a Binural synthesis, head-related transfer function.

U.S. Patent No. 6,078,669 to Maher is an audio spatial localization apparatus and method.

U.S. Patent No. 5,521,981 to Gehring is a sound positioner.

U.S. Patent No. 5,371,799 to Lowe, et al. is a stereo headphone sound source localization system.

U.S. Patent No. 5,647,016 to Takeyama is a man-machine interface in aerospace craft that produces a localized sound in response to the direction of a target relative to the facial direction of the crew.

U.S. Patent No. 4,817,149 to Myers is a three-dimensional auditory display apparatus and method utilizing enhanced bionic emulation of human binaural sound localization.

U.S. Patent No. 5,438,623 to Begault is a multi-channel spatialization system for audio signals.

U.S. Patent No. 5,809,149 to Cashion, et al. is an apparatus for creating 3-D audio imaging over headphones using binaural synthesis.

U.S. Patent No. 6,072,877 to Abel is a three-dimensional virtual audio display employing reduced complexity imaging filters.

U.S. Patent No. 5,822,438 to Sekine is a sound image position control apparatus.

U.S. Patent No. 5,440,639 to Suzuki, et al. is a sound localization control apparatus.

Copies of these items are provided in accordance with 37 CFR 1.98.

Respectfully submitted,


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937/255-2838

'SUBSTITUTE Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty Docket No AFD 473		Patent No.
				Patent Owner Brungart, D.		Group 09
Information Disclosure Statement Citation				Issue Date		

1048 U.S. PTO
09 922168
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U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date
	6,078,699	6/20/00	Maher, R.C.	381	17	7/14/97
	5,521,981	5/28/96	Gehring, L.S.	381	17	1/6/94
	5,371,799	12/06/94	Lowe, et al.	381	25	6/1/93
	5,647,016	7/8/97	Takeyama, M.	382	103	8/7/95
	4,817,149	3/28/89	Myers, P.H.	381	1	1/22/87
	5,438,623	8/1/95	Begault, D.R.	381	17	10/4/93
	5,809,149	9/15/98	Cashion, et al.	381	17	9/25/96
	6,072,877	6/6/00	Abel, J.S.	381	17	8/6/97
	5,822,438	10/13/98	Sekine, et al.	381	17	1/26/95
	5,440,639	8/8/95	Suzuki, et al.	381	17	10/13/93
	6,118,875	9/12/00	Møller, et al.	381	1	12/27/96

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	SubClass	Translation

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PAGES, ETC.)

		Brungart, D.S., "A Speech-Based Auditory Distance Display" AES 109 th Convention, Los Angeles, 2000 September 22-25.	